

Amendments to the Claims:

A listing of the entire set of pending claims (including amendments to the claims, if any) is submitted herewith per 37 CFR 1.121. This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently amended) A filament or fibre ~~(2)~~ fiber comprising:
a volume modulation ~~colouration~~ coloration producing substance ~~(6)~~;
~~containment means (8) for containing the substance in the form of an at least~~
partially light transmitting outer sheath that is configured to form an elongated core
~~which containment means is at least partially light transmitting that contains the~~
substance; and
~~stimulation means (4) for stimulating an inner electrode axially located within~~
the core that is configured to stimulate the substance to produce a change in the
volume of the substance, thereby changing the ~~colour~~ color of the filament or
fibre fiber.
2. (Currently amended) ~~A filament or fibre as claimed in C~~ The filament or fiber of
claim 1, wherein the substance ~~comprises~~ includes a volume modulation colorant.
3. (Currently amended) ~~A filament or fibre as claimed in C~~ The filament or fiber of
claim 2, wherein the volume modulation colorant ~~comprises~~ includes artificial pigment
cells.
4. (Currently amended) ~~A filament or fibre as claimed in C~~ The filament or fiber of
claim 2, wherein the volume modulation colorant ~~comprises~~ includes polymer gel
particles, which particles are immersed in an aqueous solution, the polymer gel
particles and aqueous solution together forming the substance.

5. (Currently amended) ~~A filament or fibre as claimed in C~~ The filament or fiber of claim 3₁ wherein the polymer gel particles have a diameter falling within the range of 5 to 100 μm .

6. (Currently amended) ~~A filament or fibre as claimed in C~~ The filament or fiber of claim 4₁ wherein ~~the a~~ a concentration of ~~polymer gel particles pigment cells within the aqueous solution~~ is between 5 and 40 wt%, and ~~the a~~ a concentration of gel solid content is in the range of 1 to 10 wt% of the aqueous solution.

7. (Currently amended) ~~A filament or fibre according to c~~ The filament or fiber of claim 4₁ wherein the ~~containment means (8)~~ comprises an outer sheath includes a flexible polymer.

8. (Currently amended) ~~A filament or fibre according to C~~ The filament or fiber of claim 7₁ wherein the outer sheath is transparent.

9. (Currently amended) ~~A filament or fibre according to C~~ The filament or fiber of claim 7₁ wherein the outer sheath is formed from a substantially flexible polymer.

10. (Currently amended) ~~A filament or fibre according to C~~ The filament or fiber of claim 2₁ wherein the ~~stimulation means comprises heating means for heating~~ electrode is configured to heat the substance, and a volume of the volume modulation colorant ~~is of the type having a volume that changes with temperature~~.

11. (Currently amended) ~~A filament or fibre according to C~~ The filament or fiber of claim 10₁ wherein the ~~heating means comprises an inner electrode (4)~~ extending extends substantially axially through the elongated core.

12. (Currently amended) ~~A filament or fibre according to C~~ The filament or fiber of claim 10₁ ~~further comprising means for causing an~~ including a source of electrical current ~~to that flows through the heating means~~ inner electrode.

13. (Currently amended) ~~A filament or fibre according to C~~ The filament or fiber of claim 11, wherein the inner electrode ~~(4)~~ is spaced apart from the ~~containment means~~ outer sheath by ~~tens of μm to hundreds of μm , typically 100 μm~~ a distance between 20 μm and 900 μm .

14. (Currently amended, Withdrawn) ~~A filament or fibre according to C~~ The filament or fiber of claim 2, including an electric source coupled to the inner electrode that provides ~~wherein the stimulation means comprises electric means (22, 24) for applying~~ an electric field across the substance, and a volume of the volume modulation colorant ~~is of the type having a volume that changes with~~ the electric field.

15-37 (Canceled).

38. (New, Withdrawn) The filament or fiber of claim 14, including a pair of outer electrodes, each extending along an outer surface of the elongate core, and an at least partially light transmitting isolating coating at least partially enclosing the electrodes.

39. (New, Withdrawn) The filament or fiber of claim 38, wherein the outer electrodes are entwined, and extend substantially helically along the core.

40. (New, Withdrawn) The filament or fiber of claim 14, wherein the outer sheath includes an outer electrode.

41. (New, Withdrawn) A filament or fiber of claim 40, including one or more spacers that are configured to provide a distance between the outer electrode and the inner electrode.

42. (New, Withdrawn) The filament or fiber of claim 40, wherein the outer electrode includes a conductive polymer.

43. (New, Withdrawn) The filament or fiber of claim 40, wherein the outer electrode is transparent.

44. (New, Withdrawn) The filament or fiber of claim 40, wherein the outer electrode is flexible.

45. (New, Withdrawn) The filament or fiber of claim 1, including one or more spacers that are configured to provide a distance between the outer sheath and the inner electrode.

46. (New, Withdrawn) The filament or fiber of claim 45, wherein the one or more spacers include one or more spacer wires extending substantially axially through the core.

47. (New, Withdrawn) The filament or fiber of claim 45, wherein the spacers include a plurality of substantially spherical beads.

48. (New, Withdrawn) The filament or fiber of claim 47, wherein the substantially spherical beads are contained within the substance.

49. (New, Withdrawn) The filament or fiber of claim 45, wherein the one or more spacers include one or more spacer wires extending helically along the inner electrode.

50. (New, Withdrawn) The filament or fiber of claim 45, wherein the one or more spacers are substantially non-conductive.

51. (New, Withdrawn) The filament or fiber of claim 1, including a color layer on the inner electrode.

52. (New, Withdrawn) A garment formed from a plurality of the filaments or fibers of claim 1.

53. (New, Withdrawn) A textile formed from a plurality of the filaments or fibers of claim 1.